

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 March 2005 (17.03.2005)

PCT

(10) International Publication Number
WO 2005/023756 A1

(51) International Patent Classification⁷: C07C 229/00, 261/00, 271/00 (74) Common Representative: WOCKHARDT LIMITED; c/o SESHA, Ramesh, Wockhardt Towers, Bandra-Kurla Complex, Bandra (East), Mumbai- 400 051 (IN).

(21) International Application Number: PCT/IB2003/003784 (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 8 September 2003 (08.09.2003) (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(25) Filing Language: English (26) Publication Language: English

(71) Applicant (for all designated States except US): WOCKHARDT LIMITED [IN/IN]; Wockhardt Towers, Bandra-Kurla Complex, Bandra (East), Mumbai 400 051 (IN).

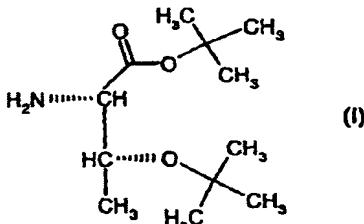
(71) Applicants and (72) Inventors: JAWEED MUKARRAM, Siddiqui, Mohammed [IN/IN]; Wockhardt Ltd., L-1, MIDC, Chikalthana, Aurangabad 431 210 (IN). BHARGAV, Krishnaji, Upadhye [IN/IN]; Wockhardt Ltd., L-1, MIDC, Chikalthana, Aurangabad 431 210 (IN). HEGDE, Deep, Virupaksha [IN/IN]; Wockhardt Ltd., L-1, MIDC, Chikalthana, Aurangabad 431 210 (IN).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR THE MANUFACTURE OF L-THREONINE-O-(1,1-DIMETHYLETHYL)-1,1-DIMETHYLETHYL ESTER



(57) Abstract: The present invention relates to a new and efficient process for the manufacture of L-Threonine-O-(1,1-dimethylethyl) ester, [H-Thr-(Bu)-O-(Bu)] of Formula (I). The compound of Formula (I) is a key product for the manufacture of human insulin from porcine or bovine insulin.

WO 2005/023756 A1